Part I AMA Guides & Substantial Evidence

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Inquiring Minds

- Who?
- What?
- How?
- · Where?
- Why?
- When?



The 6 essential "w's"

Inquiring Minds



Rudyard Kipling's "The Elephant's Child" (1902) opens with:

"I keep six honest serving-men (They taught me all I knew); Their names are What and Why and When

And How and Where and Who."

Inquiring Minds

- 1. **Who** gets to decide what?
- 2. **What** components of the rating string may be rebutted?
- 3. **How** do you rebut a strict AMA rating?
- 4. **Where** do work restrictions come in?
- 5. **Why** has the rating been modified?
- 6. **When** do you "develop the record"?

1. Who Gets to Rebut What?



At p. 23 of Almaraz II the WCAB quotes p. 19 of the Guides, "The physician must use the entire range of clinical skill and judgment when assessing whether or not the measurements or tests results are plausible and consistent with the impairment being evaluated."

(Emphasis added.)

1. Who Rebuts What?

• WPI is a MEDICAL determination that is made by the physician.



• PD is a LEGAL determination, that is made by the trier of fact.



1. Who Rebuts What?



LC 4663(c) states:

"In order for a physician's report to be considered complete on the issue of permanent disability, the report must include an apportionment determination."

Doctors are asked for a <u>WPI</u> determination, yet they must apportion industrial and non-industrial factors based on <u>PD</u>.

2. What to rebut?

Almaraz v. Environmental Recovery Services; SCIF (2009) 74 CCC 1084 at page 9 states:

"We conclude...that this language (from LC 4600(c)) means that the Schedule <u>and its component</u> <u>elements</u>, including its AMA Guides portion, are rebuttable."



2. What to Rebut?



The following is a sample rating string for a 40 year old pantry worker with stand alone rating for head pain:

13.01.00.99 - 3 [6] - 4 - 322F - 4 - 4%

2. What to Rebut?

Body Part

Number can affect occupational variant



 $16.01.04.00 = \underbrace{\textbf{Arm}}_{} \text{ (grip) for Sec'y (Occupation Group \#112)}$ Occupational variant = "E"

 $16.04.02.00 = \frac{\text{Wrist}}{\text{Occupation group #112}}$ Occupational variant = "H"

(E variant reduces the WPI%. H variant increases the WPI%.)

2. What to Rebut

Body part

Number can affect FEC rank



 $16.01.05.00 - \underline{Arm}$ (other) would = an FEC of 5

16.04.02.00 - **Wrist** would = an FEC of 4

2. What to rebut?

<u>WPI</u> Metric selected

can effect PD%



Knee 17.05.06.00 - 37 - [2] 42 - 214F - 42 = \$47,300

Gait 17.01.07.00 - 37 - [5] 47 - 214F - 47 = \$55,000

2. What to Rebut?



But Dr can <u>not</u> select Gait Measurement over Arthritis or DBE metric SOLELY because it results in a higher outcome for IW.

Almaraz II, @ page 3:5,

"We emphasize that our decision does *not* permit a physician to utilize any chapter, table, or method in the AMA Guides simply to achieve a desired result."

2. What to rebut?

FEC rank

Ogilvie v. City and County of San Francisco,

(2009) 74 CCC 1127

Explains formula to rebut DFEC (Diminished Future Earning Capacity)



2. What to rebut?

Adjustment for occupation



A 53 year old construction worker w/ a lumbar injury:

15.03.01.00 - 13[5] -17 - $\underline{380}$ H - 23 - 27% = \$25,933 15.03.01.00 - 13[5] - 17 - $\underline{482}$ J - 26 - 31% = \$31,740

2. What to rebut?

Adjustment for occupation



- Alicia v. WCAB (2008) 73 CCC 670 Case involved selection of occupational group - sheet metal worker $\#380~\mathrm{v.}$ ironworker #482.
- Dalen v. WCAB, (1972) 37 CCC 393 Case involved whether IW was determined to be "house wrecker." Cited in Almaraz II.
- National Kinney v. WCAB (Casillas), (1980) 45 CCC 1266 Tree trimmer #1 v. tree surgeon #30. Cited in Almaraz II.

2. What to rebut?

Almaraz II focused on rebuttal of the 2nd factor, WPI.:

13.01.00.99 - <u>3</u> [6] - 4 - 322F - 4 - 4%

- > 13.01.00.99 = Body part
- > 3 = WPI > [6] = DFEC
- \rightarrow 4 = adjustment for age
- ➤ 322 = occupational group
- ➤ F = occupational variant



3. How to Rebut?



LC 4660(c) states that the 2005 PDRS, "shall be prima facie evidence of the percentage of permanent disability to be attributed to each injury covered by the schedule."

Evidence Code 602: "A statute providing that a fact or a group of facts is prima facie evidence of another fact establishes a rebuttable presumption."

Almaraz II, at page 11



3. How to Rebut?



Almaraz II at page 9, that a party may rebut the PD rating "by establishing a WPI under the AMA Guides that most accurately reflects the injured employee's impairment."

(Emphasis added.)

3. How to Rebut?

Escobedo v. Marshall, (2005) 70 CCC 604 (WCAB en banc):

"reasonable medical probability"

Global standard - applies universally to all issues.

E.L. Yeager Constr'n v. WCAB (Gatten), (2006), 71 CCC 1687, (4th DCA)





Almaraz II at page 18 states,

"There are various ways that a PD % rating ... might be rebutted. This is illustrated by <u>cases</u> <u>under the prior</u> <u>schedules</u>..."

3. How to Rebut

Almaraz II cites these cases at fn. 26:

- Universal City Studios v. WCAB (Lewis), (1979) 44 CCC 1133
- Glass v. WCAB, (1980) 45 CCC 441
- Abril v. WCAB, (1976) 40 CCC 804
- *Luchini v. WCAB*, (1970) 35 CCC 205



3. How to Rebut?



Universal City Studios v. WCAB (Lewis), (1979) 44 CCC 1133 (2nd DCA)

Bernice, a 67 year old bookkeeper with a sprained ankle given "semi-sed" rating per PDRS = 60% PD.

Glass v. WCAB, (1980) 45 CCC 441

Walter Glass, a fireman, had assorted head and nervous system industrial injuries.

Many injuries were not listed in the PDRS.

The 2nd DCA affirmed the use of comparing his non-scheduled disabilities with the PDRS's entire scheme of scheduled disabilities with similar severity.



3. How to Rebut?



The Guides provide preferred methods for evaluating impairments.

Although physicians <u>must stay within the</u>
<u>four corners of the Guides</u>, there may be
times when they may deviate from the
preferred methods of the Guides in order
to accomplish substantial justice.

3. How to Rebut?



Dr. Winston writes,

"Using AMA Guides at p. 377, Figure 15-2, Ms. O'Boogie has verified bilateral radiculopathy affecting both upper extremities.

Therefore **rating by analogy to LC 4662**, I would determine her WPI to be 100%.

LC 4662 states, "Any of the following permanent disabilities shall be conclusively presumed to be total in character:

(b) Loss of both hands or the use thereof."



Kaiser v WCAB (Dragomir-Tremoureux) (2006) 71 CCC 538

Dr. Irme precluded the injured worker from "handling, writing, typing, and driving" resulting in loss of use of both hands. She was therefore presumed 100% PD per LC4662(b).

3. How to Rebut?

Harris v. City of Costa Mesa, (Panel Decision) 2007 CWCPD LEXIS 107 (VNO 491236)

City of Oakland v. WCAB, (Cage), (2008) 73 CCC 1351, 2008 CWCPD LEXIS 264 (SFO 492732) Writ Denied, (1st DCA)



3. How to Rebut?



Rodriquez v. City and County of San Francisco, Panel decision 2007 CWCPD LEXIS 1 (SFO 482530)

Pascale v. WCAB, (2008) 2008 Cal. Wrk. Comp LEXIS 267, 73 CCC 1368. Case deals with rating of psych and fibromyalgia. (Writ denied - 2nd DCA)

Sanchez v. Royal Electronic Lock & Supply, (Panel decision) 2007 CWCPD LEXIS 230 (AHM 137530)

Hernandez v. Lonestar, (Panel decision) 2007CWCPD LEXIS 143. DRE II deemed correct method for rating neck & back injury.

Hickey v. County of Sacramento, (Panel decision) 2007 CWCPD LEXIS 161. ROM deemed correct method for rating back injury and not DRE.



4. Where do Work Restrictions Come in?

8 CCR 10606 These reports should include where applicable:

(h) opinion as to the nature, extent, and duration of disability and <u>work</u> <u>limitations</u>, if any.."

(Emphasis added.)



4. Where do Work Restrictions Come in?

Gelson's Markets, Inc. v. WCAB (Fowler), (2009) 74 CCC 1313, 37 CWCR 275

WCJ & WCAB's held Gelson had received clear info on his work restrictions and had violated **132a** by not returning IW to work on 7.20.05.

2nd DCA overturned WCAB and decided that Gelson did not violate 132a because they "did not receive clear information that Fowler was released to work without restrictions."



4. Where do Work Restrictions Come in?



Almaraz II @ page 3, "We emphasize that our decision does not permit a physician to ...(select) ...a WPI that would result in a permanent disability rating based directly or indirectly on any Schedule in effect prior to 2005."

4. Where do Work Restrictions Come in?



Lopez v. WCAB (2008) 73 CCC 91). Work preclusions were not adequate to rebut an AMA Guides rating.

4. Where do Work Restrictions Come in?

Dr. Ringo writes, "Mr. Starr is restricted from fine dexterity activities and forceful gripping due to the industrial injury to his right hand. He is therefore unable to return to work as a welder. Loss of grip strength is not ratable based upon the Guides, therefore Mr. Starr has 0% WPL."



4. Where do Work Restrictions Come in?



But see Cortez v. Raymond Interior, 2007 Cal. Wrk. Comp PD LEXIS 213; 36 CWCR 41. WCJ relies on doctor's selection of grip loss measurement rather than ROM.

4. Where do Work Restrictions Come in?

AME Dr. Gordon in *Cortez* wrote, "As far as grip strength is concerned, I feel there is an additional pathomechanical problem with muscle atrophy and weakness relating to the industrial injury..."



4. Where do Work Restrictions Come in?



In *Cortez*, the WCJ relied on the AME & cited 16.8A of the Guides which states, "...if the examiner believes the individual's loss of strength represents an impairing factor that has not been considered adequately by other methods in the Guides, loss of strength may be rated separately."

4. Where do Work Restrictions Come in?

Hyatt Regency v. WCAB (Foote), (2008) 73 CCC 524. WCJ relied on doctor's grip loss measurement rather than DEU's rating for IW's injury of epicondylitis.



5. Why Has It Been Modified?



At p. 23 of Almaraz II, the WCAB quotes p. 19 of the Guides, "If, in spite of an observation or test result, the medical evidence appears insufficient to verify that an impairment of a certain magnitude exists, the physician may modify the impairment rating accordingly and then describe and explain the reason for the modification in writing."

5. Why Has It Been Modified?

If doctors select a proposed "modified" rating, in lieu of a strict AMA Guides impairment %, they <u>must</u> provide a thorough analysis and explanation.

Tautologies don't work, but succinct reasoning may.

Do not drop cigarette ends on the floor, as they burn the hands and knees of customers as they leave,
NOTICE-PUBLIC BAR
OUR PUBLIC BAR IS PRESENTLY
NOT OPEN BECAUSE IT IS CLOSED. MANAGER

Dr. Paul writes:

There are 4 options for rating **Ms. McCartney's** shoulder injury:

- ROM method would = 9% WPI, but that can not be used because of shoulder instability.
- 2. Considering her 10% loss of arm function x 60% UE impairment = 6%WPI



5. Why Has It Been Modified?

Dr. Paul writes:

"There are 4 options for rating **Ms. McCartney's** shoulder injury:

- Based on her restriction from no reaching at or above shoulder level, and the impact this would have on her ADLs, her WPI = 17%.
- Table 13-22 (Rating Chronic Pain in UE) would result in 37% WPI due to severe impact of injury on ADLs.



5. Why Has It Been Modified?

Class 1		Class 2		Class 3		Class 4	
Dominant Extremity 1%-9% Impairment of the Whole Person	Nondominant Extremity 1%-4% Impairment of the Whole Person	Dominant Extremity 10%-24% Impairment of the Whole Person	Nondominant Extremity 5%-14% Impairment of the Whole Person	Dominant Extremity 25%-39% Impairment of the Whole Person	Nondominant Extremity 15%-29% Impairment of the Whole Person	Dominant Extremity 40%-60% Impairment of the Whole Person	Nondominan Extremity 30%-45% Impairment of the Whole Person
Individual can us extremity for sel	se the involved f-care, daily olding, but is lim-	Individual can us extremity for sel grasp and hold culty, but has no		Individual can u extremity but hi self-care activiti	is difficulty with	Individual canno involved extrem or daily activitie	ity for self-care

What about?

- **Table 16-26:** Upper Extremity Impairment due to Symptomatic Shoulder Instability Patterns
- **Table 16-27:** Impairment of UE After Arthroplasty
- Table 16-22: Joint Impairment from Persistent
- Table 16-18: Impairment values due to joint



5. Why Has It Been Modified?

Dr must describe how an IW's ADLs have been impacted by the industrial injury:

- $\underline{\textbf{C}}ommunication$
- Activity that's physical
 Nonspecialized hand activities
 Travel
- Self-care, personal hygiene
- **S**ensory function
- $\overline{\mathbf{S}}$ exual function
- Sleep



5. Why Has It Been Modified?



There needs to be a **separate** explanation if an ADL is also a stand alone impairment, such as for:

- Sleep or
- · Sexual dysfunction.

Med-Legal #1 - Dr. Yoko writes,

"Mrs. Ono became MMI on May 5, 2009 and is still using Coumadin.

Using page 207, Table 19.6 of the AMA Guides, a **permanent** impairment in the range of 10% is suggested, but I would give the patient 20% WPI for the need to take Coumadin. I assume that once she no longer needs the Coumadin, the impairment can be removed." (Emphasis added.)



5. Why Has It Been Modified?



Med-Legal #2 - Dr. Yoko writes,

'Sergeant Pepper has an industrial heart condition which requires various medication including Coumadin. This condition should be rated at 10% WPI and is to be considered as a hematopoietic system impairment separate and in addition to his heart condition.

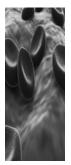
5. Why Has It Been Modified?

What is Dr. Yoko referring to?

1. Page 203 of the Guides, "Acquired bloodclotting defects are usually secondary to severe underlying conditions, such as chronic liver disease. Individuals with venous or arterial thromboembolic disease who receive anticoagulant therapy... Impairment of the whole person with acquired blood clotting defects is estimated at 0% to 10%."



2. Table 9-4 at page 203 may also be appropriate to use under the facts of this



What is Dr. Yoko referring to?

- 3. <u>Page 207</u> of the Guides, "Long-term anticoagulation with warafin... constitutes impairment in the 10% range."
- 4. Page 207 Example 9-22: 49 year old woman (life long Coumadin therapy) with venous thrombosis syndrome. WPI = 30% for underlying hemorrhagic and thrombotic disorder and anticoagulation complications.

5. Why Has It Been Modified?



The "modified" rating must be "rooted in the 'descriptions and measurements of physical impairments and corresponding % of impairments... in the AMA Guides." (Almaraz II, p.22:12)

Example: The AMA Guides state on page 400, "An inclinometer is the preferred device for obtaining accurate, reproducible measurements in a simple, practical, and inexpensive way."

5. Why Has It Been Modified?

Ferras v. United Airlines (2009) 37 CWCR 99, 2009 Cal. Wrk. Comp. PD LEXIS 119.

Dr. Kneapler determined IW's injury to his adductor tendon rated 0% WPI under Ch. 17 of the Guides.



Table 17-1 Methods Used to Evaluate Impairments of the Lower Extremities

Assessment Type	Method	Section Number
Anatomic (1-9)	Limb length discrepancy	17.2b
	Muscle atrophy	17.2d
	3. Ankylosis	17.2g
	4. Amputation	17.2i
	Arthritis of joints	17.2h
	6. Skin loss	17.2k
	7. Peripheral nerve injury	17.21
	8. Vascular	17.2n
	 Causalgia/reflex sympathetic dystrophy (CRPS) 	17.2m
Functional (10-12)	10. Range of motion	17.2f
	11. Gait derangement	17.2c
•	 Muscle strength (manual muscle testing) 	17.2e
Diagnosis based (13)	Fractures	17.2j
	Ligament injuries	17.2
	Meniscectomies	17.2j
	Foot deformities	17.2
	Hip and pelvic bursitis	17.2j
	Lower extremity joint replacements	17.2j

5. Why Has It Been Modified?



In his report, Dr. Kneapler explained that the result from Mr. Ferras' surgery to repair adductor tendon, was similar to a hernia repair.

Although, Mr. Ferras did not have a hernia, Dr. Kneapler analogized his impairment to those listed in the hernia table in the Guides, Table 6-9.

5. Why Has It Been Modified?

Table 6-9 Criteria for Rating Permanent Impairment Due to Herniation

Class 1
0%-9% Impairment of the
Whole Person

A. Palpable deflect in supporting structures of abdominal wall

and

B. slight protrusion at site of defect with increased abdominal pressure; readily reducible or

C. occasional mild discomfort at site of defect
but not precluding most activities of daily
living

Since there is no punctuation, which is correct? $\begin{array}{c} Option \ 1: \ A+B \ or \ A+C \\ Option \ 2: \ A+B \ or \ C \end{array}$

6. When to Develop the Record

Novela v. WCAB (2009) 74 CCC 1394

Case illustrates the need for medical reports that constitute substantial evidence.

WCAB reviewed medical reports entered as evidence and then relied on the WCAB's assigned independent medical examiner for PD rating.

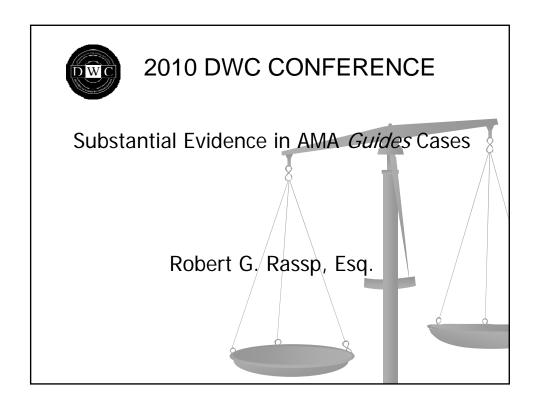


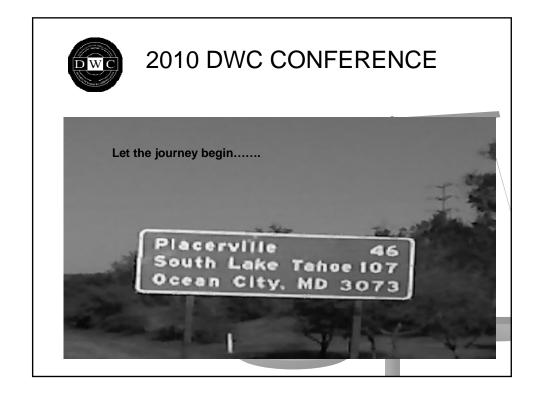
6. When to Develop the Record



See also *Costa v. Hardy Diagnostic*, (2006) 71 CCC 1797
(WCAB en banc)

WCAB states at page 7, "Pursuant to LC 5701 and 5906... the Appeals Board has both the authority and the duty to further develop the record when necessary to accomplish substantial justice by obtaining additional evidence, including medical evidence, at any time during the proceedings."







Page 11 of the AMA Guides 5th Edition states:

"In situations where impairment ratings are not provided, the *Guides* suggests that physicians use clinical judgment, comparing measurable impairment resulting from the unlisted condition to measurable impairment resulting from similar conditions with similar impairment of function in performing activities of daily living."

Page 1-4, second column, second paragraph states:

"If an impairment based on an objective medical condition is not addressed by the AMA *Guides*, physicians should use clinical judgment, comparing measurable impairment resulting from the unlisted objective medical condition to measurable impairment resulting from similar objective medical conditions with similar impairment of function in performing activities of daily living. (AMA Guides page 11).



Substantial Evidence

- The AMA Guides does not refer to "rating by analogy."
- The goal is to find the "most accurate rating."
- Physicians should provide the strict rating and then comment on whether that rating is the most accurate and if so why.
- Physician can then provide an alternative rating, indicating the method used and the rationale for the conclusions and why it is more accurate than a strict rating.
- Applicants can rebut a strict rating and Defendants can rebut an alternative rating.



There are many cases in which a strict WPI rating does not accurately account for an injured worker's work function impairment.

These cases include medical conditions that are directly ratable under the AMA *Guides*, medical conditions that are listed but result in a WPI of 0 because the condition does not affect ADL functioning but does affect work functioning and medical conditions that are not listed in the AMA *Guides* at all.



Substantial Evidence

This scenario applies under the following circumstances:

The objective medical condition is not mentioned or listed in the AMA *Guides* 5th Edition and the industrial injury permanently affects the injured worker's future earning capacity and work functioning; or

The objective medical condition is listed and rated but the WPI rating does not accurately describe the effect of the industrial injury on the injured worker's loss of work functioning;/or

The objective medical condition does not affect the injured workers' ADL functioning but the WPI rating, if any, does not accurately reflect the fact that the industrial injury does affect the injured worker's work functioning.



The proper analysis in every case for substantiality is as follows:

- Does the industrial injury cause permanent objective medical findings?
- 2. Is that objective medical condition ratable under the AMA *Guides* 5th Edition?
- 3. If the objective medical condition is not rated in the *Guides*, is the objective medical condition ratable under a similar listed medical condition in the AMA *Guides*?
- 4. Since impairment of ADL functions and impairment of work functions are different, does a strict WPI rating from the *Guides* accurately describe the effects of the impairment on the IW's work functions?
- 5. If not is there any alternative chapter, tables or method that provides a more accurate rating of the IW's impairment?
- 6. Should the record be developed to determine an alternative rating that is more accurate than a "strict" rating under the AMA *Guides*?



Substantial Evidence

"OBJECTIVE MEDICAL CONDITIONS" MEAN:

 Any medical condition that is recognized by physicians within a given medical specialty.

"PERMANENT OBJECTIVE MEDICAL FINDINGS" MEAN:

- Any objective medical finding that is permanent and can be diagnosed and assessed by any physician utilizing standardized methods of diagnosis and assessment.
 - Confirmed by diagnostic imaging studies
 - Confirmed by operative reports
 - Confirmed by physical examination
 - Confirmed by standard tests, lab studies.



Knee case example: 1% WPI for partial medical meniscectomy Table 17-33 but in treating physician's P&S report, under physical examination section, there was 0 mm interval cartilage in medial joint of same injured knee. This is a significant objective finding under Table 17-31 for the arthritis impairments.

The IW is a candidate for a/total knee replacement. WCJ blew up the Stipulated Award and ordered an adequacy hearing with an eye towards having the IW get an exam by a PQME or retain an attorney to see if there is a CT injury.



Substantial Evidence

What is the difference between the effects of an impairment on ADL and work functioning?

- ADL functioning Table 1-2 on page 4 (brushing teeth; standing, walking, stair climbing)
- Work activities require more time, stamina, intensity, exertion, and work productivity standards than ADL functions (keyboarding for 6 or more hours per day, 5 days per week; working eight hours a day while standing, walking at a construction site).



The Guides specifically state that they do not include work disability. See Chapter 1, section 1.2, page 4: "Impairment percentages or ratings developed by medical specialists are consensus-derived estimates that reflect the severity of the medical condition and the degree to which the impairment decreases an individual's ability to perform common activities of daily living (ADL), excluding work."

See section 1.2, page 9: "The *Guides* is not intended to be used for direct estimates of work disability. Impairment percentages derived according to the *Guides* criteria do not measure work disability. Therefore, it is inappropriate to use the *Guides* criteria or ratings to make direct estimates of work disability."



Substantial Evidence

If both a strict interpretation and a WPI rating using an alternative method from the same physician or different ones are substantial evidence, the WCJ will choose the one rating that is the most accurate and is based on the most credible and persuasive report and evidence

The WCAB in AG-II implies that a physician has to consider the effect of an industrial injury on the IW's ADL and work functions because the *GUIDES* do not account for impairment of work function. In addition, ADL and work functions do not necessarily overlap.

Even a WPI rating based on a strict interpretation of the *Guides* may be the most accurate rating.



Rating instructions:

- Always provide proposed rating instructions to a WCJ at the MSC and at the time of trial.
- 2. When the WCJ reviews Stipulations and Issues (the five page Pre-Trial Conference Statement) completed by the parties at the MSC, make sure the specific and precise parts of body claimed are separately named and identified: e.g. "thoracic and lumbar spine, right thumb, right wrist, right elbow, right shoulder."
- 3. Do not use terms like "upper extremity" or "lower extremity" or "back" or "neck." Do use same parts of body used in the *Guides*.



Substantial Evidence

- The heart and cardio-vascular system can be the same or separate parts of body that are independently ratable. An IW can have a heart arrhythmia and hypertension with two separate ratings from Chapters 3 and 4, respectively; or one rating for a Class 3 cardio-vascular hypertensive disease rating for hypertension with left ventricular hypertrophy.
- Rule 10602 states in part: "The WCAB [or a WCJ] may request the DEU to prepare a formal rating determination...The request may refer to an accompanying medical report or chart for the sole purpose of describing measurable physical elements of the condition that are clearly and exactly identifiable. In every instance, the request shall describe the factors of disability in full."



Alternative Rating Methods – Lower Extremity Cases

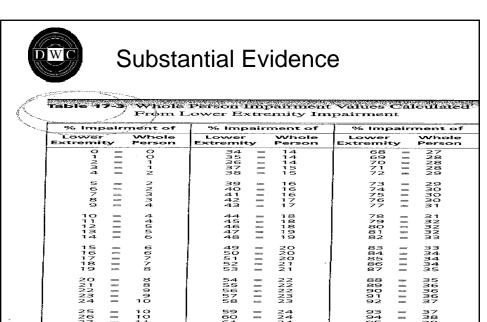
- 39 year old cashier/stock worker at chain pharmacy fell down stairs injuring her right knee.
- Positive MRI for "partially or completely torn ACL"
- Positive anterior drawer sign
- 7 degree flexion contracture
- ¾ cm atrophy
- Positive grind test (patellar compression test)
- AME report initially rated 0% WPI ... But the IW has a permanent/
- "preclusion from kneeling, squatting, going up and down stairs; no walking on uneven terrain, no pivoting and no other activities involving comparable effort as with regards to the left knee; she has lost 25 % of her pre-injury capacity for these activities."
- Make sure physician does correct strict rating first: Table 17-33

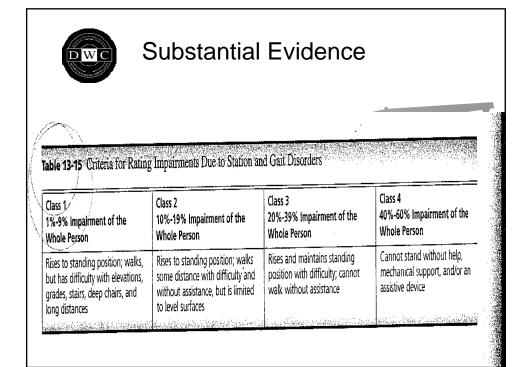


See specific instructions for CRPS of the lower extremity.

Substantial Evidence

	-Cimb Length Discrepancy	Gait Derangement	Muscle Atrophy	Muscie Strength	ROM Ankylosis	Arthritis (DJD)	Amputation	Diagnosis- Based Esti- mates (DBE)	Skin Loss	Peripheral Nerve Injury	Complex Regional Pain Syndrome (CRPS)	Vascular
imb Length Discrepancy		х					х					
Sait Derangement	х		х	х	×	×	x	×	х	- ×	×	х
Muscle Atrophy		×		×	х	x	×	х -		×	×	
Muscle Strength		×	×		х	×		×		х	0	
ROM Ankylosis	_	×	×	×		×		×			0	
Arthritis (DJD)		×	×	×	×							
Amputation	х	×	х	. х								
Diagnosis- Based Esti- mates (DBE)		×	×	x	×							
Skin Lass		х										<u> </u>
Peripheral Nerve Injury		x	х	х							×	
Complex Regional Pain Syndrome (CRPS)		х	х	0	0					×		х
		×		ta sida sina maka		- 1	iat la Albadai notai		50 to 1 k %	. Discussive confi	J	tic statistics







Upper Extremity Alternative Impairment Ratings

- Fractured right elbow with contracture and avascular necrosis. Strict WPI is ROM 6% WPI, "most accurate rating" is 21% WPI based on ROM, 12% WPI Table 16-18 loss of function of proximal radioulnar joint and 3% pain related impairment. Components were added and not combined.
- Shoulder cases physician can use Table 16-18: glenohumeral joint is supported by the rotator cuff (maximum value is 36% WPI); acromioclavicular joint has maximum value of 15% WPI. "What percent loss of function does the joint have on a permanent basis?"

Substantial Evidence

Fable 16-18 Maximum Impairment Values for the Digits;
Hand, Wrist, Elbow, and Shoulder Due to
Disorders of Specific Joints or Units*

The same of the sa		% Impai	irment of	
Units and Joints	Unit	Hand	Upper Extremity	Whole Person
Shoulder Glenohumeral Acromioclavicular Sternoclavicular			60 25 5	36 15 3
Elbow Entire elbow Ulnohumeral Proximal radioulnar		=	70 50 20	42 30 12
Wrist Entire wrist Radiocarpal Distal radioulnar Proximal carpal row			60 40 20 30	36 24 12 18
Entire hand		100	90	54
Thumb Entire thumb CMC MP IP	100 60 15 25	40 24 6 10	36 22 5 "	22 13 3 5
Index and middle Entire finger MP PIP DIP	100 50 30 20	20 10 6 4	18 9 5 4	11 5 3
Ring or little Entire finger MP PIP DIP	100 50 30 20	10 5 3 2	9 5 3 2	5 3 2 1

^{*} Each value is related to the next larger units and the whole person



Table 16-18 Maximum Impairment Values for the Digits,

/ Hand, Wrist, Elbow, and Shoulder Due to
Disorders of Specific Joints or Units*

		% Impa	irment of	
Units and Joints	Unit	Hand	Upper Extremity	Whole Persor
Shoulder Glenohumeral Acromioclavicular Sternoclavicular	=	=	60 25 5	36 15 3
Elbow Entire elbow Ulnohumeral Proximal radioulnar	Ξ	=	70 50 20	42 30 12
Wrist Entire wrist Radiocarpal Distal radioulnar Proximal carpal row Entire hand	===	100	60 40 20 30 90	36 24 12 18 54
Thumb Entire thumb CMC MP IP	100 60 15 25	40 24 6 10	36 22 5 9	22 13 3 5
Index and middle Entire finger MP PIP DIP	100 50 30 20	20 10 6 4	18 9 5 4	11 5 3 2
Ring or little Entire finger MP PIP DIP	100 50 30 20	10 5 3 2	9 5 3 2	5 3 2

Table 16-27 Impairment of the Upper Extremity After Arthroplasty of Specific Bones or Joints

1	% Impairment o	f Upper Extremity
Level of Arthroplasty	Implant Arthroplasty	Resection Arthroplasty
Total shoulder Distal clavicle (isolated) Proximal clavicle (isolated)	24 	30 10 3
Total elbow Radial head (isolated)	28 8	35 10
Total wrist Radiocarpal Ulnar head (isolated) Proximal row carpectomy Carpal bone (isolated) Radial styloid (isolated)	24 16 8 - 8	10 12 10 5
Thumb CMC MP IP	9 2 4	11 3 5
Index or middle finger MP PIP DIP	4 2 1	5 3 2
Ring or little finger MP PIP DIP	2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2 1 1

CMC; thumb carpometacarpal; IP; thumb interphalangeal; MP; metacarpophalangeal; PIP; proximal interphalangeal, DIP; distal interphalangeal.

Modified from Swanson AB, de Groof Swanson G. Principles and methods of impatrment evaluation in the hand and upper extremity. In: Engelberg AE, ed. Guides to the Evaluation of Premment Implainent. Third ed. Chiego, IR: American Medical Association; 1989;47; perpende with the assistance of DM Lichtman, Fort Worth, Texas, and EG McFarland, Billimore, Mayland.



Substantial Evidence

Upper Extremity Alternative Impairment Ratings

- Is grip loss back? Tables 16-31 through 16-34. Use especially for CTS cases and combination of forearm related injuries (e.g. CTS along with De Quervain's tenosynovitis, epicondylitis or fractured wrist bones).
- Carpal tunnel syndrome alone:
 - Tables 16-10, 16-11 and 16-15 for sensory and motor ratings
 - Table 16-2: What percentage loss of use of the hand? (the hand is 90% of the UE which is 60% WPI, so 60% x .90 = 54% WPI for loss of use of hand). "What percentage loss of use of the hand is there?"
 - Table 13-22 (Table 13-16 is the same one) chronic pain in one UE.



Upper Extremity Alternative Impairment Ratings CLOSE ENCOUNTER WITH A TABLE SAW:

- A 29 year old journeyman carpenter was cutting wood on a table saw when the wood bucked. The Applicant sustained complex lacerations to his left/thumb, index, middle and ring fingers including open fractures, digital nerve damage PIP fractures, flexor tendon injuries, loss of ulnar sensitivity left thumb, partial amputation left thumb and left index finger.
- One year later, IW is MMI and treating physician gives 15% WPI using strict rating method. Doctor omits from rating 50% grip and pinch loss listed in physical examination section of this report and any cosmetic deformities under Chapter 8 of the AMA Guides.



Substantial Evidence

CLOSE ENCOUNTER WITH A TABLE SAW:

- Permanent work restrictions: "No work performing frequent repetitive gripping, grasping, holding and heavy lifting" with the left hand. IW is "QIW."
- The physician's conclusions only accounted for anatomic loss and not functional loss. Grip and pinch loss rates 12% WPI in addition to the 15% anatomic loss.
- □ If you add anatomic and functional loss, rating would be 27% WPI. (Alternative Method A).
- □ If there is 50% loss of use of left hand for ADL and work functions you also get 27% WPI (Tables 16-2, 16-3 and Figure 16-2) (Alternative Method B).



Upper Extremity Alternative Impairment Ratings

- A Close Encounter With A Table Saw
 - Physician's report did not account for loss of function of left hand.
 - Do the AMA Guides really account for loss of ADL function embedded in the WPI ratings? If so, how?
 - Alternative Method A
 - Use anatomic ratings (15% WPI) and add or combine with functional ratings (12% WPI) taking into consideration loss of ADL and work function based on objective medical evidence = 27% WPI.
 - Alternative Method B
 - Use Tables 16-2 and 16-3 to determine percentage loss of use of hand for ADL and work functions based on proportional loss of use of hand to total loss of use of hand. This also rates 27% WPI.



Substantial Evidence

Table 16-31 Average Strength of Unsupported Grip by
Occupation in 100 Subjects

	Grip Strength (kg)					
Occupation	Males Fe			males		
	Major Hand	Minor Hand	Major Hand	Minor Hand		
Skilled	47.0	45.4	26.8	24.4		
Sedentary	47.2	44.1	23.1	21.1		
Manual	48.5	44.6	24.2	22.0		
Average	47.6	45.0	24.6	22.4		

Adapted with permission from Swanson AB. Matev IB. de Groot Swanson. The strength of the hand. Bull Prosthet Res. Fall 1970:145-153.

Table 16-32 Average Strength of Grip by Age in 100 Subjects

	Grip Strength (kg)					
	IN.	Males				
Age Group (yrs)	Major Hand	Minor Hand	Major Hand	Minor Hand		
< 20	45.2	42.6	23.8	22.8		
20-29	48.5	46.2	24.6	22.7		
30-39	49.2	44.5	30.8	28.0		
40-49	49.0	47.3	23.4	21.5		
50-59	45.9	43.5	22.3	18.2		

Adapted with permission from Swanson AB, Matev IB, de Groot Swanson. The strength of the hand. Bull Prostlet Res. Fall 1970:145-153.

Table 16-33 Average Strength of Lateral Pinch by Occupation in 100 Subjects

Occupation	1	Lateral Pinch (kg)					
		Aales	Females				
	Major Hand	Minor Hand	Major Hand	Minor			
Skilled	6.6	6.4	4.4	4.3			
Sedentary	6.3	6.1	4.1	3.9			
Manual	8.5	7.7	6.0	5.5			
Average	7.5	7.1	4.9	4.7			

Adapted with permission from Swanson, AB, Matev IB, de Groot Swanson. The strength of the hand. Bull Prosthet Res. Fall 1970:145-153.

Table 16-34 Upper Extremity Joint Impairment Due to
Loss of Grip or Pinch Strength

% Strength Loss Index	% Upper Extremity Impairment
10- 30	10
31- 60	20
61-100	30

An index of loss of strength uses the following formula:

 $\frac{Normal\ strength-Limited\ strength}{Normal\ strength} = \frac{Strength\ loss}{index\ \%}$



Table 16-34 Upper Extremity Joint Impairment Due to
Loss of Grip or Pinch Strength

% Strength Loss Index	% Upper Extremity Impairment
10- 30	10
31- 60	20
61-100	30
Carrie de como de la carrie de	

An index of loss of strength uses the following formula:

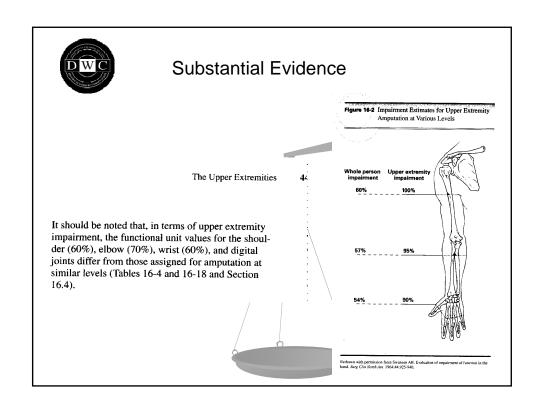
Normal strength – Limited strength = Strength loss
Normal strength index %



Substantial Evidence

_ %	Impa	irment of	%	lmp	airment of	%	lmp	airment of	%	Impa	airment of	%	Imp	airment of	%	imp	airment of
Han	1	Upper Extremity	Han	d	Upper Extremity	Han	Ь	Upper Extremity	Hane	i	Upper Extremity	Han	d	Upper Extremity	Hand	d	Upper Extremity
0	=	0	18	=	16	36	=	32	54	=	49	72	=	65	90	=	81
1	=	1	19	=	17	37	=	33	1			73	=	66	91	=	82
2	=	2	20	=	18	38	-	34	55	=	50	74	~	67	92	=	83
3	=	3				39	=	35	56	=	50				93	=	84
4	=	4	21	=	19				57	=	51	75	=	68	94	=	85
			22	=	20	40	=	36	58	=	52 ·	76	=	68			
5	⋍	5	23	=	21	41	=	37	59	=	53	77	=	69	95	=	86
6	=	5	24	=	22	42	=	38				78	=	70	96	-	86
7	=	6				43	=	39	60	=	54	79	=	71	97	=	87
8	=	7	25	=	23	44	=	40	61	=	55				98	=	88
9	=	8	26	=	23				62	=	56	80	=	72	99	=	89
			27	=	24	45	=	41	63	=	57	81	=	73	100	==	90
10	22	9	28	=	25	46	=	41	64	=	58	82	=	74	1.00		50
11	=	10	29	=	26	47	=	42				83	=	75			
12	=	11				48	=	43	65	=	59	84	=	76	i		
13	=	12	30	=	27	49	=	44	66	=	59	•		, ,			
14	=	13	31	=	28	"			67	=	60	85	=	77			
			32	=	29	50	=	45	68	=	61	86	=	77	1		
15	=	14	33	=	30	51	=	46	69	=	62	87	_	78			
16	=	14	34	_	31	52	_	47	1	_	-	88	_	79 79			
17	=	15				53	_	48	70	=	63	89	_	80			

* Consult Table 16-3 to convert upper extremity impairment to whole person impairment.





Upper Extremity Alternative Impairment Ratings

- When there are multiple impairments to the same upper extremity (e.g. CTS, epicondylitis, rotator cuff tear or AC joint with DC arthroplasty)
 - Rate each component separately for strict rating
 - Use Table 16-3 to determine permanent percentage loss of function of entire upper extremity.
 - Full value of UE = 60% WPI for an amputation
 - "What percent loss of ADL and work functioning does the IW have with respect to the entire UE due to these industrial injuries?"
 - Requires deposition of evaluating or treating physician
 - Is this an allowable "method" under A-G II?
 - Which method provides the most accurate rating?



Table 16-3. Conversion of Impairment of the Upper Extremity to Impairment of the Whole Person

% Impairment of	% Impairment of	% Impairment of	% Impairment of	% Impairment of
Upper Whole	Upper Whole	Upper Whole	Upper Whole	Upper Whole
Extremity Person	Extremity Person	Extremity Person	Extremity Person	Extremity Person
0 = 0	20 = 12	40 = 24	60 = 36	80 = 48
1 = 1	21 = 13	41 = 25	61 = 37	81 = 49
2 = 1	22 = 13	42 = 25	62 = 37	82 = 49
3 = 2	23 = 14	43 = 26	63 = 38	83 = 50
4 = 2	24 = 14	44 = 26	64 = 38	84 = 50
5 = 3	25 = 15	45 = 27	65 = 39	85 = 51
6 = 4	26 = 16	46 = 28	66 = 40	86 = 52
7 = 4	27 = 16	47 = 28	67 = 40	87 = 52
8 = 5	28 = 17	48 = 29	68 = 41	88 = 53
9 = 5	29 = 17	49 = 29	69 = 41	89 = 53
10 = 6	30 = 18	50 = 30	70 = 42	90 = 54
11 = 7	31 = 19	51 = 31	71 = 43	91 = 55
12 = 7	32 = 19	52 = 31	72 = 43	92 = 55
13 = 8	33 = 20	53 = 32	73 = 44	93 = 56
14 = 8	34 = 20	54 = 32	74 = 44	94 = 56
15 = 9	35 = 21	55 = 33	75 = 45	95 = 57
16 = 10	36 = 22	56 = 34	76 = 46	96 = 58
17 = 10	37 = 22	57 = 34	77 = 46	97 = 58
18 = 11	38 = 23	58 = 35	78 = 47	98 = 59
19 = 11	39 = 23	59 = 35	79 = 47	99 = 59
************	**************************************			100 = 60



Substantial Evidence

Table 13-22 Criteria for Rating Impairment Related to Chronic Pain in One Upper Extremity

Class 1		Class 2		Class 3		Class 4		
Dominant Extremity 1%-9% Impairment of the Whole Person	Nondominant Extremity 1%-4% Impairment of the Whole Person	Dominant Extremity 10%-24% Impairment of the Whole Person	Nondominant Extremity 5%-14% Impairment of the Whole Person	Dominant Extremity 25%-39% Impairment of the Whole Person	Nondominant Extremity 15%-29% Impairment of the Whole Person	Dominant Extremity 40%-60% Impairment of the Whole Person	Nondominant Extremity 30%-45% Impairment of the Whole Person	
Individual can use the involved extremity for self-care, daily activities, and holding, but is limited in digital dexterity		Individual can us extremity for self grasp and hold c culty, but has no	f-care and can objects with diffi- digital dexterity	Individual can use the involved extremity but has difficulty with self-care activities		Individual cannot use the involved extremity for self-care or daily activities		



- MEDICAL INFORMATION SPINE
- HERNIATED INTERVERTEBRAL DISC WITH NERVE ROOT IMPINGEMENT
- SPONDYLOSIS
- SPONDYLOLYSIS
- SPINAL CANAL STENOSIS
- NEURAL FORAMINA STENOSIS
- SPONDYLOLISTHESIS
- FRACTURES
- FACET JOINT SYNDROME
- DISC BULGES WITH NERVE ROOT IRRITATION
- ANNULAR TEARS

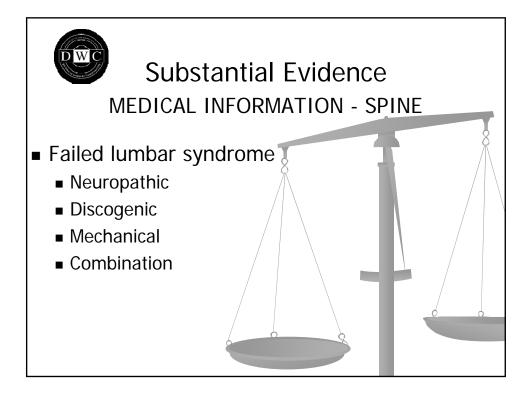




Table 15-7. Criteria for Rating Whole Person Impairment Percent Due to Specific Spine Disorders

		% impairi	ment of the Whol	e reison
Disor	der	Cervical	Thoracic	Lumbar
1 60	actures			
	Compression of one vertebral body.			
	0%-25%	4	2	5
	25%-50%	6	3	7
	> 50%	10	5	12
- 0	Fracture of posterior element (pedicle, lamina, articular process, transverse process).	a	2	5
	Note: An impairment due to compression of a vertebra and one due to fracture of a posterior element are combined using the Combined Values Chart (p. 604). Fractures or compressions of several vertebrae are combined using the Combined Values Chart.			
C	Reduced dislocation of one vertebra.	5	3	6
	If two or more vertebrae are dislocated and reduced, combine the estimates using the Combined Values Chart.		-	
	An unreduced dislocation causes impairment until it is reduced; the physician should then evaluate the impairment on the basis of the individual's condition with the dislocation reduced.			
	If no reduction is possible, the physician should evaluate the impairment on the basis of the range-of-motion and neurologic findings according to criteria in this chapter and Chapter 13, The Central and Peripheral Nervous System.			
40 100	tervertebral disk or other soft-tissue lesion			
	agnosis must be based on clinical symptoms and signs and imaging information.	1		
	Unoperated on, with no residual signs or symptoms.	0 1	0	0
	Unoperated on, with medically documented injury, pain, and rigidity* associated with none to minimal degenerative changes on structural tests.†	4	2	5
C	Unoperated on, stable, with medically documented injury, pain, and rigidity* associated with moderate to severe degenerative changes on structural tests;† includes herniated nucleus pulposus with or without radiculopathy.	6	3	7
Đ	Surgically treated disk lesion without residual signs or symptoms; includes disk injection.	7	4	8
	Surgically treated disk lesion with residual, medically documented pain and rigidity.	1 9 1		10
F.	Multiple levels, with or without operations and with or without residual signs or symptoms.	Add 1% per level		
G	Multiple operations with or without residual signs or symptoms - 4			
-	1. Second operation	Add 2%		
	2. Third or subsequent operation	Add 1% per oper.	ation	
	2. Hind of subsequent operation	naa i sa per oper	30017	
	pondylolysis and spondylolisthesis, not operated on . Spondylolysis or grade I (19-25% slippage) or grade II (26%-50% slippage) spondylolistheelis, accompanied by medically documented injury that is stable, and medically documented pain and rigidity with or without muscle sparm.	6	3	7
в		8	4	9
	pinal stenosis, segmental instability, spondylolisthesis, fracture, r dislocation, operated on			
^	Single-level decompression without spinal fusion and without residual signs or symptoms	7	4	8
- 8	Single-level decompression without spinal fusion with residual signs or symptoms	9	5	10
c	Single-level spinal fusion with or without decompression without residual signs or symptoms	8	4	9
D	Single-level spinal fusion with or without decompression with residual signs and symptoms	10	5	12
E	Multiple levels, operated on, with residual, medically documented pain and rigidity.	Add 1% per level		
	1. Second operation	Add 2%		
		Add 1% per oper		

The phriese "medically decumented injury, pain, and rigidity" implies not only that an injury or illness has occurred but also that the condition is stable, as shown by evaluator's blatory, examination, and office diagnostic data, and that a permanenci impairment exists, which is at least partially due to the condition being evaluated.



Substantial Evidence

■ MEDICAL INFORMATION – SPINE, Table 15-7

Intervertebral disk or other soft-tissue lesion	į		
Diagnosis must be based on clinical symptoms and signs and imaging information.	_	0	n
A. Unoperated on, with no residual signs or symptoms.	"	0	
B. Unoperated on, with medically documented injury, pain, and rigidity* associated with none to minimal degenerative changes on structural tests.†	4	2	5
C. Unoperated on, stable, with medically documented injury, pain, and rigidity* associated with moderate to severe degenerative changes on structural tests;† includes herniated nucleus pulposus with or without radiculopathy.	6	3	7
D. Surgically treated disk lesion without residual signs or symptoms; includes disk injection.	7	4	8
E. Surgically treated disk lesion with residual, medically documented pain and rigidity.	9	5	10
F. Multiple levels, with or without operations and with or without residual signs or symptoms.	Add 1% per level		
G. Multiple operations with or without residual signs or symptoms			
1. Second operation	Add 2%		
2. Third or subsequent operation	Add 1% per oper	ation	



Alternative Spinal Impairment Ratings

- Physician gives DRE or ROM strict rating then comments on whether the rating accurately describes the IW's impairment of work function.
- Alternative ratings depend on extent of objective findings.
- Clinically, 93% of the time the physician does not know what condition within a sub-region of the spine is causing symptoms.
- Even asymptomatic objective findings can cause an impairment of function or make another impairment worse.



Substantial Evidence

Alternative Spinal Impairment Ratings

- Alternative Rating #1: Table 15-7 use
 - "Soft Tissue Lesions" can mean any soft tissue disorder including muscle spasms, torn annulus; objective signs, symptoms and complaints of recurrent back strains
- Spinal fusion cases
 - Table 15-7 Add 10% WPI for cervical, 12% WPI for lumbar for each level that is fused (instead of adding only 1% WPI for each additional level) and then add to ROM rating and then add to neurologic rating.



SUBSTANTIAL EVIDENCE

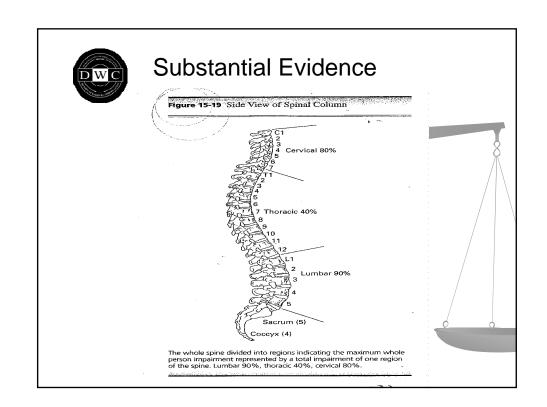
Intervertebral disk or other soft-tissue lesion			
Diagnosis must be based on clinical symptoms and signs and imaging information.			
A. Unoperated on, with no residual signs or symptoms.	0	0	0
B. Unoperated on, with medically documented injury, pain, and rigidity* associated with none to minimal degenerative changes on structural tests. †	4	2	5
C. Unoperated on, stable, with medically documented injury, pain, and rigidity* associated with moderate to severe degenerative changes on structural tests;† includes herniated nucleus pulposus with or without radiculopathy.	6	3	7
 Surgically treated disk lesion without residual signs or symptoms; includes disk injection. 	7	4	8
E. Surgically treated disk lesion with residual, medically documented pain and rigidity.	9	5	10
F. Multiple levels, with or without operations and with or without residual signs or symptoms.	Add 1% per level		
G. Multiple operations with or without residual signs or symptoms			
1. Second operation	Add 2%		
2. Third or subsequent operation	Add 1% per opera	ation	

III. Spondylolysis and spondylolisthesis, not operated on A. Spondylolysis or grade I (1%-25% slippage) or grade II (26%-50% slippage)	6	3	7
spondylolisthesis, accompanied by medically documented injury that is stable, and medically documented pain and rigidity with or without muscle spasm.			
B. Grade III (51 %-75% slippage) or grade IV (76%-100% slippage) spondylolisthesis, accompanied by medically documented injury that is stable, and medically documented pain and rigidity with or without muscle spasm.	8	4	9
IV. Spinal stenosis, segmental instability, spondylolisthesis, fracture,			
or dislocation, operated on			
Single-level decompression without spinal fusion and without residual signs or symptoms	7	4	8
B. Single-level decompression without spinal fusion with residual signs or symptoms	9	5	10
C. Single-level spinal fusion with or without decompression without residual signs or symptoms	8	4	9
D. Single-level spinal fusion with or without decompression with residual signs and symptoms	10	5	12
	Add 1% per level		
Multiple levels, operated on, with residual, medically documented pain and rigidity.	Add 170 per level		



Alternative Spinal Impairment Ratings

- The regional spinal impairment methods Figure 15-19 on page 427
 - Method A: Use maximum WPI value for entire sub-region and determine percentage loss of ADL and work function due to objective medical findings
 - Cervical Spine is worth 80% WPI
 - Thoracic Spine is worth 40% WPI
 - Lumbar Spine is worth 90% WPI
 - Best if used when there is are multiple pathologies occurring within a sub-region





Alternative Spinal Impairment Ratings

- The regional spinal impairment methods Figure 15-19 on page 427
 - Method B: Follow instructions on page 427 to determine WPI based on regional impairment from DRE or ROM strict rating
 - Cervical Spine: DRE rating/.35 or ROM rating/.80
 - Thoracic Spine: DRE rating/.20 or ROM rating/.40
 - Lumbar Spine: DRE rating/.75 or ROM rating/.90
 - Can be used with only one level of impairment
 - E.G. 15% DRE III cervical = 15/.35 = 43% regional imp x 80% = 34% WPI (assumes one level pathology only)
 - E.G. DRE III 13% lumbar = 13/.75 = 17% regional x 90% = 16% WPI (assumes one level pathology only)



Substantial Evidence

15.13 Criteria for Converting Whole Person Impairment to Regional Spine Impairment

In some instances, the evaluator may be asked to express an impairment rating in terms of the involved spine region rather than the whole person. This is done by dividing the whole person impairment estimate by the percent of spine function that has been assigned to that region. Under the DRE method, a whole person estimate being converted to a regional estimate would be divided by 0.35 for the cervical spine, 0.20 for the

thoracic spine, and 0.75 for the lumbar and sacral spines. Under the ROM method, a whole person estimate being converted to a regional estimate should be divided by 0.80 for the cervical spine, 0.40 for the thoracic spine, or 0.90 for the lumbosacral spine (Figure 15-19). For example, a 24-year-old female office worker sustained a cervical injury that, after it was healed and stable, resulted in a whole body impairment, estimated by the DRE method, of 20%. Dividing the 20% by 0.35 results in 57% impairment of the cervical spine. An individual with multiple lumbar compression fractures was rated 25% whole body impairment by the ROM method. To obtain an estimate of lumbar spine impairment, the physician should divide the 25% by 0.9, resulting in a 27.7% rounded up to 28% lumbar spine impairment. Any values that exceed 100% are rounded down to 100% regional impairment.



Alternative Spinal Impairment Ratings – Other Chapters

- Use of other non-orthopedic chapters, tables and methods for a spinal impairment
 - IW has Herrington rods implanted for scoliosis as a teenager from T1 through L-3.
 - She is physically active, normal weight, snow skis, runs for exercise, can golf 18 holes, no treatment for years
 - Special education teacher lifts student down stairs and injures entire back.
 - Herrington rods removed and two level fusion performed at L3 through L-5
 - IW now severely limited in ADL and work functions, gained 75 lbs, walks with a forward list, needs assistance at work, can't golf and can't run or walk over 3 mph.



Substantial Evidence

lass 1	Class 2	Class 3	Class 4
%-9% Impairment of the	10%-29% Impairment of the	30%-49% Impairment of the	50%-100% Impairment of the
Vhole Person	Whole Person	Whole Person	Whole Person
ecause of serious implications freduced coronary blood flow, is not reasonable to classify egree of impairment as 05% egree of impairment and of the compairment of CHD corroborated physical examination or laboratory tests; this class of impairment should be reserved for reasonary engingeraphy is performed, or for those on whom soronary angiography is performed, or for those on whom soronary angiography is performed, or for those on whom soronary angiography is performed, or for those on whom soronary angiography is performed as the company of the coronary artery is found with a noral EF, METS determination is of applicable	History of MI or angina pectoris documented by appropriate laboratory studies, but at time of evaluation, no symptoms while evaluation, no symptoms while studies or even moderately heavy physical exertion (functional class I) and may require moderate dietary adjustment or medication to prevent angina or to remain free of signs and symptoms of CHF and symptoms of CHF and symptoms of CHF and specific control of the symptoms of CHF and Symp	History of MI documented by appropriate laboratory studies, or angina pectoris documented by changes on resting or exercise ECG or radioisotrope study suggestive of ischemia or either fixed or dynamic focal obstruction of at least 50% of control of the control	History of MI documented by appropriate laboratory studies, or angina pectoris documented by changes on resting ECG or radioisotope study highly suggestive of impocardial sichemia or either fixed or dynamic focal obstruction of at least 50% of either fixed or dynamic focal obstruction of at least 50% of either fixed or dynamic focal obstruction of at least 50% of either fixed or dynamic focal obstruction of at least 50% of entire fixed or dynamic focal obstruction of an obstruction of the fixed



	Class 3 30%-49% Impairment of the Whole Person	Class 4 50%-100% Impairment of the Whole Person
	History of Mi documented by appropriate laboratory studies, or angina pectoris documented by changes on resting or exercise ECG or radioisotope study suggestive of ischemia	History of MI documented by appropriate laboratory studies, or angina pectoris documented by changes on resting ECG or radioisotope study highly suggestive of myocardial ischemia
	or	or
	either fixed or dynamic focal obstruction of at least 50% of coronary artery, angiography, and function testing	either fixed or dynamic focal obstruction of at least 50% of one or more coronary arteries, demonstrated by anglography and function testing
١	requires moderate dietary	and
	adjustment or drugs to prevent frequent angina or to remain free of symptoms and signs of CHF, but may develop angina pectoris after moderately heavy physical exertion (functional class II); METS >5 but <7	requires moderate dietary adjustments or drugs to prevent angina or to remain free of symptoms and signs of CHF, but continues to develop symptoms of angina pectoris or CHF during ordinary daily activities (func-
ı	or	tional class III or IV); METS <5
l	has recovered from coronary	or
	artery surgery or angioplasty, continues to require treatment, and has symptoms described above	has recovered from coronary artery bypass surgery or angio- plasty and continues to require treatment and have symptoms as described above



Substantial Evidence

Alternative Spinal Impairment Ratings – Other Chapters

- Use of other non-orthopedic chapters, tables and methods for a spinal impairment
 - AME used Table 3-6a the Coronary Heart Disease table under a Class 4 50% WPI to 100% WPI based on the IW's deconditioning since the industrial injuries and subsequent surgery.
 - IW is not capable of walking over 3 mph or golfing; her level of exertion is < 5 METS.
 - AME opines 65% WPI based on lower end of Class 4 because she can still work but requires a full/time assistant.
 - AME testified he did not need ergometric exercise (treadmill or bicycle) testing



Alternative Rating Methods – Other Chapters

- Table 6-9 Hernias
 - Class 2 sounds like a recurrent back sprain with asymmetric spinal motion, muscle guarding, muscle spasm, up to 19% WPI.
 - Must have objective evidence of recurrent back sprains with no diagnostic imaging evidence of pathology
 - "Recurrent back sprains" are not in AMA Guides
 - Class 2 also used for torn and surgically repaired adductor tendon in leg with permanent restrictions of "no lifting over 30 lbs" for airline mechanic.
 - Torn adductor tendon is not listed in the AMA Guides
 - Nothing is in Chapter 17 Lower Extremities on this
 - See Ferras vs. United Airlines, BPD (May 2009 37 CWCR 99)



Substantial Evidence

6.6 Hernias

6.6a Criteria for Rating Permanent Impairment Due to Herniation

Criteria for evaluating impairment due to herniation are listed in Table 6-9.

Class 1. 0%-9% Impairment of the Whole Person	Class 2 10%-19% Impairment of the Whole Person	Class 3 20%-30% Impairment of the Whole Person
Palpable defect in supporting structures of abdominal wall	Palpable defect in supporting structures of abdominal wall	Palpable defect in supporting structures of abdominal wall
and	and	and
slight protrusion at site of defect with increased abdominal pressure; readily reducible	frequent or persistent protrusion at site of defect with increased abdominal pressure; manually reducible	persistent, irreducible, or irreparable protr sion at site of defect and
or	or	limitation in activities of daily living
occasional mild discomfort at site of defect but not precluding most activities of daily living	frequent discomfort, precluding heavy lifting but not hampering some activities of daily living	



